

REMARKS

In response to the above-identified Office Action, Applicant seeks reconsideration of the application. In this response, no claims are canceled, Claims 1, 8 and 28 are amended, and no claims are added. Accordingly, Claims 1-13, 18, 20, 21 and 23-29 are pending.

I. Claim Rejections Under 35 U.S.C. 102(e)

Claims 1-13 18, 20-21, 23-27 and 28-29 are rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,362,091 issued to Andideh et al. (“Andideh”). Applicant respectfully traverses this rejection.

The specification of the present application addresses the problem of the formation of undesired openings in the photoimageable material due to substrate reflections during patterning (e.g., photoimaging) process. Applicant has amended the independent claims to clarify this feature of the present patent application. Specifically, independent Claim 1 has been amended to recite that the dielectric cap layer is configured to suppress substrate reflections during patterning. Similarly, independent Claims 8 and 28 both have been amended to recite that that the dielectric layer is configured to suppress substrate reflection during patterning. Applicant submits that at least this limitation is not disclosed by Andideh.

Andideh discloses a semiconductor structure formed by alternating low-k insulating layers 401, 403, 405, 407, 409 and 411 and high strength insulating layers 402, 404, 406, 408 and 410 on substrate 400. However, Andideh fails to teach or suggest that these alternating layers are configured to suppress substrate reflections during patterning processing as recited by Applicant. At least for this reason, Applicant submits that Andideh cannot anticipate independent Claims 1, 8 and 28 since it fails to disclose every limitation of these claims.

Additionally, with respect to Claim 1, Applicant submits that Andideh fails to teach or suggest introducing a dielectric cap layer comprising a plurality of different material layers over the base layer, wherein each respective layer of the plurality of different material layers is selectively etchable with respect to the etch stop layer. In making this rejection, the Examiner asserts that this limitation is taught by Andideh, citing figure 2; column 5, lines 5-55 of Andideh. The portions of Andideh referred by the Examiner merely indicate that one or more layers of 402, 404, 406, 408 and 410 may serve as etch stop but does not specifically state that each respective layer of the plurality of different material layers is selectively etchable with respect to the etch stop layer as required by Claim 1. In order to anticipate a claim, the relied upon reference must disclose every limitation of the claim. However, there is nothing in Andideh that specifically indicates that each respective layer of the plurality of different material layers is selectively etchable with respect to the etch stop layer, as recited in Claim 1. Thus, Andideh cannot anticipate independent Claim 1 or any of its dependent claims.

With respect to Claim 28, Applicant submits that Andideh fails to teach or suggest forming a dielectric cap layer over the base layer, wherein the dielectric cap layer is formed by alternating a first material layer and a second material layer having a higher dielectric constant than the first material layer, wherein the first material layer is more than five times thicker than the second material layer. In making this rejection, the Examiner asserts that this limitation is taught by Andideh, citing column 3, lines 14-67; column 4, lines 1-39; claim 28 of Andideh. The portions of Andideh referred by the Examiner merely disclose the thickness range of the alternating layers. However, there is nothing in Andideh that specifically indicates that the first material layer is more than five times thicker than the second material layer as required by Claim 28. Thus, Andideh cannot anticipate independent Claim 28 or any of its dependent claims.

In view of the foregoing, Applicant respectfully submits that Claims 1, 8 and 28 are not anticipated by Andideh and requests withdrawal of this rejection. Dependent Claims 2-7, 9-13 and 18, 20, 21, 23-27 and 29 are submitted as not being anticipated by Andideh at least for the reasons given in support of their base Claims 1, 8 and 28.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record and are in condition for allowance, and such action is earnestly solicited at the earliest possible date. If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly, extension of time fees. If a telephone interview would expedite the prosecution of this Application, the Examiner is invited to contact the undersigned at (310) 207-3800.

Respectfully submitted,

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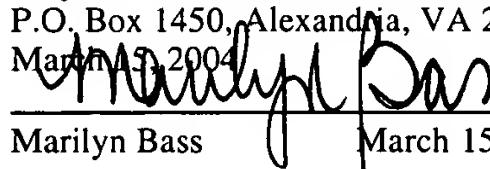
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March 15, 2004

Marilyn Bass

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